Feed the Future Country Fact Sheet

Online Version: https://www.feedthefuture.gov/article/fortified-feed-helps-kenyan-smallholders-adapt-climate-change

Fortified Feed Helps Kenyan Smallholders Adapt to Climate Change

In the rangelands of Kenya, the supply and quality of feed for animals is tenuous. Erratic rainfall and frequent drought, exacerbated by climate change, have forced pastoral communities to look for alternative, drought-resilient plant species that can reliably feed livestock.

In response to this need, Margaret Syomiti, a researcher with the Feed the Future Innovation Lab for Adapting Livestock Systems to Climate Change, led by Colorado State University, has developed a new feed technology to mitigate the effects of a changing environmental landscape. Syomiti's technology utilizes an invasive shrub species, *Prosopis juliflora,* which is aggressively invading grazing lands and in some cases blocking access to water sources in Kenya. By transforming *Prosopis* into fortified feed blocks – crushing the seeds so they cannot re-germinate – this technology has the potential to slow the invasion of *Prosopis* in crucial grazing lands and give animals a more balanced, nutritious diet.

Produced using low cost technology, the fortified feed blocks improve feed intake and digestibility of poor quality feed resources that have become more common due to the ecological impacts of climate change. Inexpensive and easy to transport, these blocks also open up entrepreneurship opportunities for women, who can manufacture them in areas of plenty and market them in areas of scarcity, sustaining livestock and economic vitality during dry seasons.

In October, Margaret Syomiti exhibited her product and technology at the United Nations Empower Women Share Fair in Nairobi. Her project was selected from over a hundred entries by a team of 20 experts from the United Nations, research, academia, civil society and the private sector.